



Sheet 1 of 5

FORM PTO-1449

U. S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

**INFORMATION DISCLOSURE CITATION**

(Use several sheets if necessary)

ATTY. DOCKET NO.  
3701-4000

SERIAL NO.  
09/282,303

APPLICANT

Overgaard Bjarklev et al.

FILING DATE  
3/31/99

GROUP ART UNIT  
2874

**U. S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	RECEIVED
Pan	EP 0 810 453	3/97	Europe				
✓	WO 99/00685	1/99	PCT				

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)**

Pan	J.C. Knight et al., Optical Materials, "Photonic Crystals as Optical Fibers - Physics and Applications", January 1999
	T.A. Birks, et al., Electronics Letters, "Full 2-D Photonic Bandgaps in Silica/Air Structures", October 26, 1995, vol. 31, no. 22
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	Jes Broeng et al, Electromagnetic Optics, "Waveguiding by the Photonic Band Gap Effect", September 1998
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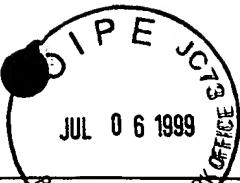
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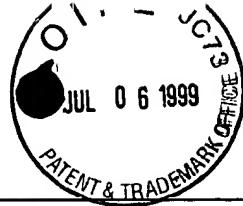
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<i>P Gr</i>		Stig E. Barkou, Optics Letters, "Silica-air Photonic Crystal Fiber Design That Permits Waveguiding by a True Photonic Bandgap Effect", January 1999, vol. 24, no. 1
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		J.C. Knight, et al., Optical Fiber Communication, "Pure Silica Single-mode Fiber With Hexagonal Photonic Crystal Cladding", February 29, 1996
		J.C. Knight, et al., Optics Letters, "All-silica Single-mode Optical Fiber with Photonic Crystal Cladding", October 1, 1996, vol. 21, no. 19
<i>V</i>		T.A. Birks et al., Optics Letters, "Endlessly Single-mode Photonic Crystal Fiber", July 1, 1997, vol. 22, no. 13

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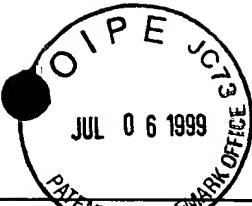
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	T.A. Birks et al., Photonic Band Gap Materials Kluwer 1996, "2D Photonic Band Gap Structures in Fiber Form", 1996
<i>D</i>	P. St. J. Russell et al., ECOC 97 Conference Publication, No. 448, "Photonic Crystal Fibers", September 1997

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INFORMATION DISCLOSURE CITATION  (Use several sheets if necessary)			APPLICANT Overgaard Bjarklev et al.	
			FILING DATE 3/31/99	GROUP ART UNIT 2874

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### FOREIGN PATENT DOCUMENTS

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### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

P. Caw		T.A. Birks et al., OFC/IOOC'99, Novel Fiber Structures, "The Analogy Between Photonic Crystal Fibers and Step Index Fibers", February 1999
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		Robert S. Windeler et al., OFC/IOOC'99, Novel Fiber Structures, "Silica-air Microstructured Fibers: Properties and Applications", February 1999
		Tanya M. Monro et al., OFC/IOOC'99, Novel Fiber Structures, "Efficient Modelling of Holey Fibers", February 1999
		A. Ferrando et al., Optics Letters, "Full vector Analysis of a Realistic Photonic Crystal Fiber", March 1999, vol. 24, no. 5
✓		A. Ferrando et al., Electronics letters, "Designing a Photonic Crystal Fiber With Flattened Chromatic Dispersion", February 1999, vol. 35, no. 4

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P. Caw	2/13/99

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							YES	NO

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)**

<i>PJN</i>		M.J. Gander et al., Electronics Letters, "Experimental Measurement of Group Velocity Dispersion in Photonic Crystal Fiber", January 7, 1999, vol. 35, no. 1
<i>J</i>		R.P. Espindola et al., Electronics Letters, "External Refractive Index Insensitive Air-clad Long Period Fiber Grating", February 18, 1999, vol. 35, no. 4

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## FOREIGN PATENT DOCUMENTS

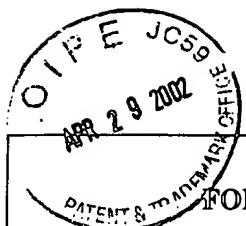
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PBN		Jes Broeng et al., Center for Communications, Optics, and Materials (COM), "Polarizaton Properties of Photonic Bandgap Fibers".
J		Jes Broeng et al., Optics Letters, "Analysis of Air-Guiding Photonic Bandgap Fibers", January 15, 2000, vol. 25, no. 2.
V		Tanya M. Monro et al, Optics Letters, "Holey Fibers With Random Cladding Distributions", February 15, 2000, vol. 25, no. 4.

EXAMINER	<i>PBNA</i>	DATE CONSIDERED	<i>2/13/03</i>
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	<b>Applicant:</b> Broeng et al.	
	<b>Filing Date:</b> March 31, 1999	<b>Group Art Unit:</b> 2877

## **U.S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

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**OTHER DOCUMENTS (Including Author, Title, Date, etc.)**

<i>P Gr</i>	D. Mogilevtsev et al., "Group-velocity Dispersion in Photonic Crystal Fibers", Optics Letters, November 1, 1998
<i>✓</i>	J.C. Knight et al., "Photonic Band Gap Guidance in Optical Fibers", Science, November 20, 1998

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March 31, 1999Group Art Unit:  
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## U.S. PATENT DOCUMENTS

Examiner Initial		Patent Number	Issue Date	Name	Class	Sub-Class	Filing Date
Paw		6,404,966	6/11/02	Kawanishi et al.	385	125	5/6/99

## FOREIGN PATENT DOCUMENTS

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Paw	Broeng et al., Polarization Properties of Photonic Bandgap Fibres.
	Bjarklev, Microstructured Fibres, May 23-28, 1999.
	Russell et al., Microscopic Glass Fibre Crystals.
	Rosenberg et al., Out-of-plane two-dimensional photonic band structure effects observed in the visible spectrum, 9/9/97.
	Cassagne et al., Hexagonal photonic-band-gap structures, 10/19/95.
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	Gadot et al., Experimental demonstration of complete photonic band gap in graphite structure, 7/24/97.
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